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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PRONE, JASON D

ART UNIT PAPER NUMBER

3724

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,390

Applicant(s)

GRAFE ET AL.

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 18-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: In the amendment filed 10 May 2002, the new paragraph to be inserted on page 11 starting on line 8, items "9a", "9b", and "9c". It is also noted that following this section of the amendment was an amendment to drawings, mainly Figures 3a and 3b. However, these amended Figures are not scanned in with the case. This case has been examiner by 3 examiners and now has been scanned into our new IFW system. This examiner can only assume that these amended Figures were lost during all the transferring around. However, it cannot be assumed what amendments were incorporated in these Figures. A new copy of amended Figures 3a and 3b are requested. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "hydraulic, mechanical, driving, and adjusting means", of claim 19, "a cutting bit and anvil", of claim 20, and "two gear portions and bolt means", of claim 21, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 19, 20, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In regards to claim 19, the phrase "the roller means cooperates with one of hydraulic, mechanical, driving and adjusting means" is unclear. It is uncertain what structure allows the roller means to operate with on of the previously list means. It is also uncertain what structure each of the "mean" incorporates and where it is located within the apparatus.

6. In regards to claim 20, the terms "cutting bit" and "anvil" are unclear. It is unclear what structure the cutting bit and the anvil incorporate.

7. In regards to claim 22, the phrase "a number of x-revolutions of one of the beam bridge and the blade drum corresponds to a number of y-revolutions of another of the beam bridge and the blade drum" is unclear. The way that statement is made, it is possible that "a number of x-revolutions of the beam bridge correspond to a number of y-revolutions of another of the beam bridge". The specification only provided support for one beam bridge working together with a blade drum. It is uncertain what structure this another beam bridge incorporates.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 18, 19, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sieger (2,076,969) in view of Sieger (2,588,581), Martin (3,037,396), and Sato et al. (5,207,138). '969 discloses the invention including an upper blade support formed as a beam bridge having a diameter (4^c) carrying a first blade (4^a) and having a shaft stub on each of opposite longitudinal sides (Fig. 2), a lower blade drum having a diameter (4^d) and carrying a second blade (4^b), a means for permanently rotationally connecting the beam bridge with the lower drum (Pg. 1 Column 2 Lines 48-51) and having two synchronization tooth gears fixedly connected with the beam bridge and the blade drum, respectively, having different pitch circle diameters corresponding roughly to diameters of respective blades (Fig. 1), that the first and second blades cooperating with each other in a predetermined cutting position of the beam bridge and the lower blade drum for cutting the rolled strip (Figs. 5-7), roller means for supporting the tensioned strip and providing for lifting of the strip before passing of the second lower blade and for lowering the strip before passing of the first upper blade through the blade gap (Roller means 19 is connected to an adjusting means 23 which is synchronized to move the roller to lift the strip before passing of the lower blade and to lower the strip before passing of the upper blade {Pg. 2 Column 2 Lines 50-62}. The roller means will accomplish this as the upper blade will passing a cutting zone while the roller is lowered {as shown to be slightly after the position in fig. 1} and will be raised while the lower blade is in a cutting zone {during a cutting action}), that the roller means cooperates with one of hydraulic, mechanical, driving and adjusting means an operation

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of which is synchronized with passing of a respective one of the second lower and first upper blades through the blade gap between the beam bridge and the blade drum (Fig. 1), and that a number of x-revolutions of the beam bridge corresponds to a number y-revolutions of the blade drum so that the beam bridge and the blade drum are brought into the cutting position after different but finite number of the x-revolutions and y-revolutions of the beam bridge and the blade drum (Figs. 5-7) but fails to disclose that the upper blade support has a relatively large diameter and the lower blade drum has a comparatively small diameter, two pinch-roller sets located in front of and behind the beam bridge and the blade drum, respectively, for advancing the rolled strip under longitudinal tensioning through a gap between the beam bridge and the blade drum, and that the tooth gears are substantially backlash-free wherein in order to at least minimize the backlash, the tooth gear associated with the blade drum is divided in two gear portions, and the shear further comprises bolt means for securing the two gear portions in a predetermined angular position with respect to each other. '581 teaches an upper blade support that has a relatively large diameter (17) and a lower blade drum that has a comparatively small diameter (16). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided '969 with a larger upper blade support and a smaller lower blade drum, as taught by '581, to allow the smaller drum to be placed inside the apparatus, instead of the larger drum, because of its smaller size it could be easily replaced due to all the other components of the apparatus than a larger drum that would interfere with these components.

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Sato et al. teaches two pinch-roller sets located in front of and behind the beam bridge and the blade drum, respectively, for advancing the rolled strip under longitudinal tensioning through a gap between the beam bridge and the blade drum (89). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided '969 with two pinch-roller sets, as taught by Sato et al., to tension the work piece to facilitate cutting.

Martin teaches that the tooth gears are substantially backlash-free wherein in order to at least minimize the backlash, the tooth gear associated with the blade drum is divided in two gear portions (29 and 30), and the shear further comprises bolt means for securing the two gear portions in a predetermined angular position with respect to each other (37). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided '969 with backlash-free gear portions, as taught by Martin, to provide for a safer cutting apparatus.

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over '969 in view of '581, Martin, and Sato et al. as applied to claim 18 above, and further in view of Leroy (4,480,516). '969, '581, Martin, and Sato et al. disclose the invention but fail to disclose that the first and second blades are replaced with a cutting bit and an anvil. Leroy teaches a cutting bit (19) and an anvil (21). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided '969 in view of '581, Martin, and Sato et al. with a cutting bit and an anvil, as taught by Leroy, to allow for an alternate form of cutting.

Response to Arguments

11. Applicant's arguments filed 16 September 2004 have been fully considered but they are not persuasive. Sieger (2,076,969) clearly shows an upper blade support in the form of a beam bridge with shaft stubs provided on opposite longitudinal sides. The claim does not disclose any specific structure for the beam bridge, therefore, the structure disclosed by '969 covers the claimed language.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 571-272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JP
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